













What's the Issue?

When water runs off a property, it flows into the City's municipal separate storm sewer system (MS4) which is composed of streets, storm drains, ditches, waterways and other facilities, both public and private, by which storm water is conveyed. The MS4 is separate from the City's sanitary sewer system, which goes to one of the City's two wastewater treatment plants. Discharges to the MS4 do not get treated; they flow directly into area creeks, rivers and lakes. Once there, it can negatively impact our waterways:

- •Some fish require clear water to see prey
- •Sediment fills in habitat for macroinvertebrates
- •Sediment covers fish eggs and nests
- •Sediment blocks sunlight, preventing the photosynthesis which is the base of the aquatic food chain
- •Sediment absorbs heat, increasing water temperature
- •Filter feeders take in sediment during feeding, and accumulate pollutants

What is a Small Site?

Any land-disturbing project that will result in a total land disturbance of less than 1 acre.

Disturbances include but are not limited to:

- •Construction/redevelopment of buildings, parking lots and drives
- •Grading, excavation and fill activity
- •Disturbance of lawn for septic tanks, well, utilities, etc

1 acre = 43,560 square feet

If your disturbed area is equal to or greater than 1 acre, you will need to apply for a City Land Disturbance Permit. Visit: http://www.springfieldmo.gov/erosionsedimentcontrol





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http://www.springfieldmo.gov/stormwater

Visit our local watershed groups: James River Basin Partnership jamesriverbasin.com

Watershed Committee of the Ozarks watershedcommittee.org

Visit <u>bigurbie.org</u> to learn about recent and upcoming watershed improvement projects.



Small Construction Sites





Best Management Practices (BMPs)



Best Management Practices (BMPs)

The Best Management Practices (BMPs) shown on the site plan below are procedures that should be used to prevent pollutants, such as sediment and construction materials, from entering our storm drains and polluting our waterways.



Protecting our streams from sediment. Clockwise from top left 1) Plan ahead. Disturb only one part of the site at a time, and be sure to install

sediment control devices prior to disturbance. Do not leave bare soil for extended periods of time. Instead, stabilize the exposed area before moving to the next phase; 2) Vegetation slows runoff and provides erosion control. If possible, leave strips of vegetation along the perimeter of the site and along any water bodies or drainage ditches; 3) Protect areas that provide environmental and aesthetic benefits, including trees, gardens, ponds, etc. Mark these areas clearly, and fence them off if necessary; 4) Cover and protect chemicals after they are open. Keep materials elevated above the ground to prevent comingling with stormwater runoff; 5) To prevent sediment "track-out" from vehicles and tires, stabilize the entrance with a pad of gravel or other BMP. It may be necessary to add fresh gravel as the exit becomes saturated with sediment; 6) Prevent excessive dust and soil erosion through the use of a tarp for dirt, gravel, and sand that must be stored on-site. Control dust by sprinkling water until soil is moist; 7) When pouring concrete on-site, either have drivers leave the site to rinse out their trucks, or install a concrete wash-out pit that is lined with plastic. The water will evaporate, and the hardened concrete no longer poses a threat to stormwater quality; 8) Stabilize bare soil with seeding, sodding, mulching, soil roughening, geotextiles, etc; 9) Storm drains flow directly to our creeks. Nothing but rainwater shall enter them. You must prevent sediment and pollutants from leaving your site. Inlet controls, such as sand or gravel bags, compost sock, etc., can be used to keep sediment from entering the storm drainage system; 10) Use silt fence, silt sock, or other BMP to trap sediment before it leaves the site or enters a waterway. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Remove sediment build-up at 50% of total capacity for silt socks and at 6" sediment depth for silt fence.

